•

SEQUENCE PROTOCOL

1.8

<110> Schering AG

<120> Human PEM as a Target for Fertility Control

<130> 51852

<140> 100 27 170.7

<141> 2000-05-31

<160> 3

<170> PatentIn Ver. 2.1

<210> 1

-:211> 577

<212> DNA

<213> Homo sapiens

<400> 1

<210> 2

<211> 184

<212> PRT

<213> Homo sapiens

<400> 2

Met Ala Arg Ser Leu Val His Asp Thr Val Phe Tyr Cys Leu Ser Val

Tyr Gln Val Lys Ile Ser Pro Thr Pro Gln Leu Gly Ala Ala Ser Ser 20 25 30

Ala Glu Gly His Val Gly Gln Gly Ala Pro Gly Leu Met Gly Asn Met 35 40 45

Asn Pro Glu Gly Gly Val Asn His Glu Asn Gly Met Asn Arg Asp Gly 50 55 60

Gly Met Ile Pro Glu Gly Gly Gly Gly Asn Gln Glu Pro Arg Gln Gln 65 70 75 80

Pro Gln Pro Pro Pro Glu Glu Pro Ala Gln Ala Ala Met Glu Gly Pro
85 90 95

Gln Pro Glu Asn Met Gln Pro Arg Thr Arg Arg Thr Lys Phe Thr Leu 100° 105 110

Leu Gln Val Glu Glu Leu Glu Ser Val Phe Arg His Thr Gln Tyr Pro 115 120 125 Asp Val Pro Thr Arg Arg Glu Leu Ala Glu Asn Leu Gly Val Thr Glu 130 135 140

Asp Lys Val Arg Val Trp Phe Lys Asn Lys Arg Ala Arg Cys Arg Arg 145 150 155 160

His Gln Arg Glu Leu Met Leu Ala Asn Glu Leu Arg Ala Asp Pro Asp 165 170 175

Asp Cys Val Tyr Ile Val Val Asp 180

<210> 3

<211> 10968

<212> DNA

<213> Homo sapiens

<400> 3

caatacaaga gaatgtctgt gttaagataa ggggttgtgg agaccaaggt tcccattatg 60 cagaggaagc ctccaggtag ctggcttcag agagaataga ttgtaaatgt ttcttacttg 120 agttgattct ctcctggatc aagaaaaagg cctgcacaag aaaggggatt ctcttgagaa 180 tqtacatttc cccccacaag agacagcttt gcaggactgt ttcaaaaatat gacaaagaaa 240 cagatagggt aaaatacttt tgatttettt caageettge tatetgteat gtgatgetat 300 actagagtta ggctggaaat tggtgtctta ttgccacaga gtatgttagt cttaagttct 360 qtictaacgt taagactggt cagetgtaca egaatteeaa aagggagtag ggaataataa 420 ggcatgtctg acgcctactt cctgtcatga cctgaataag tttttcaggt taactttgga 480 tggtttacaa tagcatgaac aaagcagagg tctgacagct tcgttccagt gagtggatat 600 tetqqaacat tgeteagggt accatettet tactettett tgagcageac taaatgaaaa 660 ggtccccttt caccttgtaa tcagcaggaa gtgggattct ctcgaagatg ttgaagatga 720 caaaataaac ttaaaggatt gttcatctgc ttttgagcta gggaaggtat aacaatatgc 780 tEtctgggcc ggggggggg gagaaaatgg agaagagcct ctttttgggc ttaatgaaat 840 thingerigt gittething aageageagg atchinggg cagaataget continues 900 tgtgtccccc acaaaaaggg agggcagtga acagaatttg gagcatagtg gagtggatca 960 acgtteaget gecacettee cataaateet atgagtagee acetaggaag titetettta 1020 gagtecagaa titiggaetga aetagteage ataaetggaa eteagetita tetigggaata 1080 cactgttgtc tcaccaggaa tctgcttcac cccttcttgc acatatttgt ggtccctaaa 1140 gggcaaggt ggtgaggatg gcataatggc aggggtaggg agggggagtg gagaaggatg 1200 tatgggtcag tgcaaactca caatgacget tggtaaactt ctgtgatgtg cagggectat 1260 tgttgatggc aagccaggga tgtcatttca tgaaagatct ccttgtcatt ttgtttaaat 1320 ggetttettt ttttttttt ttgatatgga gteteactet gttgeecagg etgaagtgea 1380 gtggtgcgat cttggctcac tgcaacctct gcctcctggg ttcaggcctc ccgcatagct 1440 gggattactg gtgcctgcca ccacatccag ctaatttttt tgtatttttg atagagacag 1500 ggtttcacca tettggetag getggtettg aacteetgae eteetgatee accegeetea 1560 geeteetaaa gtgttaagat tacaggtgtg ageeactgea eetggeetta aatggetttt 1620 taaaaacaat ttgcacctat accctactaa ccacaattgg cacacaaaaa caaatatatt 1680 gagaatttgc ctctttattg ataacataag tgcagaggag ataagggtag cctgagcggc 1740 atgggcagcc caggtgtcag tggcaccaga aaaacccatc tccaaactag ctcctgaaga 1800 aggatggcat totagggcta gtocacgacg atgtagacac agtogtotgg gtoagcacgt 1860 agticating egageatiaa tietetetiga titegeetae atetiggeeet titattetta 1920 aaccaaacct acaatcagag ggaaaagggg attggtttag tatattgaac agttaatgtc 1980 gtaatagaaa aacacaggat gcaactttat atgctattga gattttaaac tgcatcagga 2040 aaagctattt cctcattgct aaaatacctt aggaaagtta acaacatagc ccgtggccct 2100 teageteace ettagtgagg accagetttg tgccaagtee tggaataage ttattaettt 2160 tttattttttt gagacagggt cttgctgttt tgcctgggct gggatccagt ggtgcaatca 2280 tageteactg tgacattgaa ettetggget caagagatee teccacetea eeeteecaag 2340 tagetggtae tagaggtaea tgccaetatg cccagetgtt ttaattttte tgtagagaea 2400 gggtcteget atgttgeeca ggetggaett gageteetgg ceteaagtga tetteecace 2460 ttggtgtccc aaagtgttgg gattacaagc gtgagccact gtgcccagcc ccaattttaa 2520 tattetttaa tggttaette cagatattgg atgeagttet ggettatgag ttgtteeagg 2580 teettgetgt ttgttaatte aatgeetgge aacagggtaa caaaaggtgt geatetgaca 2640 agtgaccatc aactatccag etgeeteetg etceeteete actagggaga gtttcatett 2700 gtttgtggga gaagttcggc atggtaaaaa gtgggcctaa tttcaaatca ttttcagggg attotttaaa aaatooatot ttaqtatqta gtaaataata ggaaagagog cactggaatt 1820 ttagacaggt ttccttccag gatgtctaag ggatcattcg tcctctggca agagaggcct 2880 qqacactgcc ttgatatttt agcctgtagc attaaggaaa gttgaaacca gctcgaccca 2940 aattaactga aactotcaaa aatotttgct cacccaatag tttaggggaa agaggcatac 3000 cattqtcacc aatgccaaat cttcgttctc caatctgctg cactctccaa accttcctgg 3060 qctcaqqaca aggtcagctc actctgtttt acctacagct ccaggatcct ggactggagg 3120 tgctgtagcc cagtaaggca gggcccccta ggccctgcta ctcaaccagg agatctgaat 3180 cccacccct attectaagg cagaaaggtg gaaccagcat tttaggaaga tggttaacat 3240 caatgtgggg gaagggtcac aaatatggct cctccctaaa tatctgccaa caattaaaaa 3300 gcaaacagac aaaaaaagcc tgtcagttag atgtcactat cctctcagca acctagttaa 3360 eggagtttat attgtattta ttactttcaa aagttetcaa aetgcaaatt gtaagetgca 3420 caaaqqqcct tctttctcta cctgacacgt ctttttcact ttcccagtta aggatttgca 3480 gtatttctgc tgcatgaggc cagtctctaa aagtctaaaa gagctcattt tgggagcttt 3540 caaqtqtacc actggtcaaa tctctataaa cataaccaaa gtgtacagtg ggttaactgg 3600 tatgttctga tactaggtct gcattcccaa tactggtttc ataaaccagt tgcattacat 3660 ctgcaaaagc tatggggaaa ctatgtatta ctttcttggg ggaaatttat gctgtatagt 3720 ttggagatac atgagagcat tctgtctctt cccttatttg tatcttgtgg ctcatattct 3780 tttcagagca ctaaggagag aacattatgt cgactcaggg aggagaaaaa caactcacca 3840 ageettgttt ttetttteet etgagtttge ettaccaget ggagaaaagt gateccaace 3900 tetttteaac ttetecaace egaaceaggt gtgattgtga gtecaecett tgecattagg 3960 atgccagcac teagtaacce getttgttag tttgettttt tggacaacce actaccagat 4020 eggeagtgea ttteceteae tacacteaca catgeactet geataaaage taataataag 4080 gtcatcctga tttttgtttt ttcttttttg ggaaaacatc actttgatac tatgtatggt 4140 tttetttggt ettaagtggt eateaettga ateetatgae etaetaatta gttaaeaetg 4200 ctfaaaggaa tgaaaagtat ttgaaattaa catgggtgtg aatctaccct aaaatgaggg 4260 ccaccteted aaacaaatte cagaaaacee acetetteaa aaaagtacea ecaaaaagaa 4320 atalaaatcc ttagatggat agaaattcct caagagaaca gtcacttaaa catttagtag 4380 tttcataatg ttgaatttgt atagtacatg catagtatgt gcaaagccta ttttgaccat 4440 attictetet aacettitea ecettetigg teaacigaaa igaatteaat attacteati 4500 ttgtttgctt cattctttag acaattttcc aaagcataca aaccttacaa accttcctca 4560 atatcaaaat aatgtgacta ttttagcaat attttcaggt tgacacatca aagtatttta 4620 gaaaattaaa acttaggget gecaetetet atactgettt accaataaet taaaaacaaa 4680 caaagaagga ccaggggctt ggacatataa gctatcttcc catcagtctc agcttaacta 4740 aghatacatt atttagtcat ghaatgigt cigigggiga attactccct catcccaata 4800 tttataaatt cactcattta gctaagtgtt tatgcctggc cttaaataat ttagtacact 4860 tgaaccetct tataaccetg ctcctccctg cattaacttg aatacttcta aggtaagact 4920 gaaccccacc atgactctac acagaaattg ttcctaaaag ataccagcgt tagaaggagt 4980 tgaattttat ttattggata catacatata tgtataatat ataatacaca tatgtgtatt 5040 atacattato atacatatat gtattatata ttacacatat atgtataata tataatacac 5100 atatgtatta tatataatac atatatgtat aatatatgtg tttcatatgt atgtatttgt 5160 ttaattttqt atacagatta ggagaagcag tttttgtttt gtttttcctt taggaaatca 5220 tatteeetaa tiggaatggg aaagaggaaa gaaccataag eiggagetta eiteetitte 5280 taccgacaag gaacccaaac ttcaaaactt atttgtcaac ataaaaaaga caataataaa 5340 aacaacaact ttagaacgtt caggacaaag cetteaaage etteaatgee etgaagcagg 5400 ttttagaatg getgteetet caaattgett tttcaagtgt actgaccege actttgtett 5460 cagtcacacc taagttttcg gcaagttccc ttctgtggag agaagatcac acatggttag 5520 tattcaaagt tgtggatgaa atgaaatata tagtatgtac tatttacttc atgcttgttt 5580 tacaatttat aatotoocot cacacotooc ccaagtatat acttttotot aattoccage 5640 tocatggttg ctttagaaat ggtttaccct catcacgaaa tttaaggtga cgttaacaac 5700 tcagtaatca agagaaatac cttttttttt ttaaattgag acaaggtctc actctgtctc 5760 ctaggetgga gtgeagtggt gtgattteag eteactgeaa ecteegeete eggggtteag 5820 acgatteteg tgcctcagec tecegagtag etgcgattac aggcacatac caccatgccc 5880 agttgatttt tgtattttta gtagagatgg ggttttgcca tgttggccag gctggtctcg 59+0 aasteetgee egteteagee teecaaagtg etgggatttg gggcatgaac cacegcacec 6000 ggccaagatg aataatttaa tgcattatta ttatttttat tattattatt tgagacaggg 6060 totoactgtc gtotatgttg gagtgcagtg gcaggatcac tgctcactgc agcctgcatg 6120 testaggete gaacgateet detgeeteag dettecaagt ggetgggagt acaggeacad 6180 accaccacac ccacatggct aattititaa gittitattia gagacggggt titigccatgt 6240 tgcccagget gttettgaae teetggaete aageaeett eecacettgg eeteccaaaa 6300 gegetegaat tacaggeetg agecacegtg cetggeeeta atgeactatt ttaataaata 6360 acaattaatg caaaaatctg tgatgaggac caggcactgt ggctcaggcc tgtaatccca 6420

qsaqtttqqq aggccgaggc aggcaaattg cttgagccca ggagtttgag actagcctgg 6480 qeaacacggc gaaaccttat ctctacacac aaaaaaaata caaaaattag ccaggtgtgg 6540 tggcctgtgc ctgcagtccc agctactcag ggggctgaca cgggaggatg gcttgaaccc 6600 aggaaqcaaa tgttgcagag agetgaaate geactgetge acteeaacet gggeeacaga 6660 qaqaqactct gtctcaagac aaaacaaaaa aaccagaaaa acaaaaaaacc aaccaaacaa 6720 acaaaaaaaa actatgatga acaaattatc aaaattttaa ataaaggaag gatctagcac 6780 alaacaqacc acaqctgggt gtggtggctc actcctataa tcccagcaac tcaggaggct 6900 gagatgggag gattgcttgg gtgacagatc ccccactcaa caaaaacaac aacaacaaca 6960 asaacaggcc atcatcacag gtaataaaag aaaaaataca taacttggac tatatcaaaa 7020 tttaaaactt ctgtatatca aaagatgcaa tgaacagagt aaaaagacaa ctcatagaat 7080 qqaaqqaaat atttgcaaat cacatctgat aaggggttaa tatccagagt gtataaagaa 7140 ctcctacaac ccaataacca aaaaaaaaga aagaaagaaa gaaaaagcca ctcagatttt 7200 aaaatgggta aaggacttaa agagatattt ctccaaagaa gatatacaag tggccactaa 7260 gcacatgaaa ggatgcacaa catcactaat cattagggaa aagcaaatcg aaactacaat 7320 gaagtatcac ctcacaccca ttaggatggc tatgtaaaaa accccagaaa ataacaagtq 7380 ttggtgagga tgtggagaaa ctggaacccc catgtactgt tggtgtgcac ctgtatctat 7440 aaaatggaat attatttagc cttaaaaagg aaggaaattc taatatatgc tgcgatatgg 7500 atgaacettg aagacettat getaagtgaa ataagteagt gacaaaaatg caaatactgt 7560 atgattetae ttacatgaga tacetagagt agteaaaate atagagacat aaaatagtag 7620 aatggtggtt gccaagggct ggggaaaggg ggaaaagggg agttgcttaa ctggtataga 7680 gacttagctt ggcaagatga gaagaattet agagatetat tgcacaacaa tgtgaacata 7740 cttaacacaa ctgaactcta tacttaaaaa gtggtttgga cggtaaattt catatttccg 7800 tatattttac cacatettta taaaagggag geaeggaeta gttteeaggt tteatteaca 7860 tamacattge aataaaacat ttacettgat geecaggagg tamatateee eeteemace 7920 ageacaaagg caggeaagga cocceagtgg etttttcetc atgattgggt ggggcaaggg 7980 agagaaaaag atgootogaa acgaacttgg agatotogtg gotootggag caggooactt 8040 acomtqtggg cacatcaggg tattgagtgt gtcggaaaac actttccagc tcctccacct 8100 quaacaqcqt qaacttegtg egeegagtte gtggetgeat gtteteggge tgeggaccet 8160 csaliggeege etgggeegge teeteeggeg ggggetgegg etgetgeega ggeteetggt 8220 ttecaccacc accetcaggg atcataccac catcacatt cataccattc tegtagttca 8280 caccogecete agggtteata traccoatga ggeetggage teettggeea acatggeett 8340 ctgogettga tgetgeecce agetgaggtg tggggettat ttttacetgg tatacaetea 8400 ggeagtagaa cacggtgtcg tggacgagcg aacgcgccat ggctggagcg ctgcgccct 8460 gcacaaactc cgtggcgtct gcagctggag tgggggttag agggtggagc tagttcctgt 8520 tetdatgett ggtattggtt acagttgcaa tgagtgggae ttgettatge geacaageaa 8580 gagagggaat ggagaggagt ggggggatgg gaagttgggg ggtgcgggtg gggagtgggg 8640 gtgttgcagg tgggagtggg gggttgtgag tgtggggtgg ggtgcaggtg gggatggggg 8700 tgtgggtgga gggtgggggg tgcacagtga gggtgggggt tgcgggtgag ggtaggggtt 8760 gtgggttggg gtgggggttg coggtggggg tacatggtgg gggtgggggt agcgggtgga 8820 gatgggaggt gtgggtggag ggtgcgtggt gggggtaggg gttgtgggtg ggggtgaggg 8880 gtgtggtatg ggtcgtgggt gggggtggca gttgagggtg gagtggggtg gccaaaacac 8940 aggggcagtg tggagaagaa aagggccaat aggaggcata tatgtatgca acatggggcc 9000 ccagettgea getttgetga etacaceeta etegggeeta gttattaeee tgaggaaage 9060 tgatttgggg gctcagaggg gaggtgagat ctcacggtga ccataggacg ccttgagtaa 9120 augtttggag aatateteat ggeetgaeee teeatatttg geageatgea cagggegegg 9180 gstattaatt aagcagaaat gattgactgg gggctgcttg ttcagagttc cagcaaaggc 9240 actgaaagca gagctgccat gctctcttca gtgctgggat cgggatcttg gagatgggca 9300 tgcagagcat tetgggtggt aagatgtget etgcaagaaa tetaaegcae eetttgagaa 9360 agtcaacaca gaataaacac gaggotgaat ctgttagcot gagactgaat atotttggot 9420 atgcaagaga aacctgtact catggcaaaa tggagtgcta taaggacaag caaaaaataa 9480 ataaataaat aaaatcgggg atggtatagg aagagcacca gtaagggcat acctgccaaa 9540 aatotocaat ottgggatgg agatttggga tttatggata tgcagottac tggatgtggg 9600 greactivity circaeagag cettytaact acaeageett cetaceacty acceeaataa 9660 grecaattae gaagaaaaac eetgaagage etggtgeagt ggeteetgea etagteecag 9720 ctactcagga ggctgagatg ggaggatcac ttgaacccag gagtttgagg ctgtggtgag 9780 ctagaatcac atggcagcac tecageetgg gcaacagaca gaggeeeett ttetttaaaa 9840 tratgaggaa gggcatggag atgtettttg agggtggaca acteatgaat cettaatttt 9960 totagagatt gtgtgtgtgc tottaagtga tgttatatac tttattttgt tttttaaaaa 10020 tattittaaa aattitatit ttaaatgito tittaaaaac titoigtato tattitatato 10080 tattggttat ttgaggattt tttggcagca tatataaata tgcagaccct ttgagtctgt 10140 agectaceaa gagagatage tetegtette atggtgatte tgageatgga aaggeeettg 10200